1. INTRODUCTION
In order to understand how prices affect access to essential medicines, the ministry of health in collaboration with the World Health Organisation (WHO), Health Action International Africa (HAI-Africa) and Coalition for Health Promotion-Uganda (HEPS-Uganda) are carrying out quarterly monitoring of medicine prices and availability in all regions of the country.

As a follow up to the surveys carried out in the April-June and July-September Quarters, the results presented below are for the October-December Quarter

Key Findings: Overall
1. Overall, availability remained highest in the private sector and lowest in the public sector during the three quarters. However, the trend reveals a decline in medicine availability in the mission and public sector facilities while in the private sector, medicine availability continued to steadily increase.
2. Availability of Artemether-Lumefantrine, the first line antimalarial, remained high in the public and mission sector facilities while it declined in the private sector facilities.
3. Prices of medicines in the Private rural facilities were higher than in Mission rural facilities.
4. Medicines in Private Sector and Mission facilities were unaffordable for the lowest paid Government worker.

2. METHODOLOGY
The survey was conducted using the standardized WHO/HAI Medicine Prices Monitoring tool. Forty key (regularly prescribed and dispensed) medicines were selected for price survey (lowest priced medicines) and availability and the data was collected from the seventy two facilities

Table 1: Distribution of facilities that were surveyed

<table>
<thead>
<tr>
<th></th>
<th>Northern</th>
<th>Eastern</th>
<th>Western</th>
<th>Central</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Rural</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>Public Urban</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Private Rural</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>Private Urban</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>Mission Rural</td>
<td>6</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Mission Urban</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>7</td>
</tr>
</tbody>
</table>

3. LIMITATIONS OF THE SURVEY
1. The survey was carried out in the non-paying side of the hospitals where majority of the population access treatment
2. Some of the facilities especially in the mission sector charged a flat rate for treatment (consultation and medicines). As a result, actual medicine prices could not be investigated, only medicine availability was investigated in these facilities.
3. Sample size for urban/rural comparisons was not quite robust enough.
4. There were very few mission urban facilities
4. RESULTS & DISCUSSION

a). Key Findings: Availability

- Overall, availability of studied medicines remained highest in the Private sector and lowest in the Public sector.
- In the Public sector, availability reduced in the third quarter by 7% when compared to the second quarter. The reduction in medicine availability was highest in the urban facilities (13%) compared to rural facilities (7%).
- Overall availability of studied medicines increased by 2% in the Private sector but the increment was more marked in the rural facilities (9%) compared to urban facilities (6%).
- In the mission sector, availability of medicines continued to decline in the third quarter but the reduction is more marked in the urban facilities.
- There was a continued increase in availability of Artemether/ Lumefantrine tab 20/120mg in the Mission and Public sector facilities while availability in the private sector declined. However, availability of Pyrimethamine/ Sulphadoxine (SP) tab 25/500mg remained high across all the facilities (more than 80%).
- Availability of antidiabetic medicines (Glibenclamide 5mg tab and Metformin tab 500mg) increased in the Private (more than 50%) and Public (though Metformin is still less than 50%) sectors while it declined in the mission sector facilities.

Discussion: Availability

The increase in availability of antidiabetic medicines in the public and private sector facilities is encouraging given the fact that Diabetes has emerged as one of the major chronic diseases in Uganda.

High availability of Artemether-Lumefantrine in the public and mission sector (more than 80%) is a positive finding which should translate into improved management of Malaria. However for the percentage of the population that seeks treatment in the private sector, the decline in availability of this medicine compared to the increased availability of SP is likely to have a negative effect on malaria case management in this sector.

b). Key Findings: Medicine Prices

- Medicine prices across the private and mission sector facilities were the same.
- In both the mission and the private sector facilities, prices of majority of the medicines did not change in this quarter when compared to the second quarter.
- In the private sector, prices of six medicines decreased by 10-25% while prices of eleven medicines increased by 3-100%. The price of Artemether-Lumefantrine increased by 3% despite its poor availability in this sector (37%).
- In the mission sector, prices of five medicines decreased by 8-38% while prices of fifteen medicines increased by 5-100%. The price of Quinine injection 300mg/ml doubled in the third quarter from Shs 500 to Shs 1000 per ampule.

Table 2: Comparison of medicine prices between and within sectors

<table>
<thead>
<tr>
<th>Sectors compared</th>
<th>Priv Urb/Priv Rur</th>
<th>Miss Urb/Mis Rur</th>
<th>Priv Urb/Mis Urb</th>
<th>Priv Rur/Mis Rur</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of times more expensive</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>No of pairs compared</td>
<td>23</td>
<td>32</td>
<td>28</td>
<td>27</td>
</tr>
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</table>
• Across the Private sector and Mission sector facilities, the price of Amoxycillin suspension remained constant.
• Though the price of cotrimoxazole suspension increased by 11% in the private sector and 50% in the mission sector facilities, it remained lower in the Mission sector.

**Discussion: Medicine prices**
- In all the three quarters, the medicines above were available in less than 50% of the Public sector facilities yet they are commonly used medicines as per the Uganda Clinical guidelines (2003).
- The increase in prices of cotrimoxazole suspension undermines management of pediatric respiratory infections.
- The reduction in prices of antidiabetic medicines in the mission sector is a positive finding likely to improve management of this chronic disease

**c. Key Findings: Affordability**

Medicines in Private Sector and Mission facilities remained unaffordable for the lowest paid Government worker.

**Discussion: Affordability**

Affordability is calculated in terms of the number of days the lowest paid government worker would have to work to pay for one treatment course of an acute condition or one month’s treatment of a chronic condition. The daily wage of the lowest paid government worker is at US$3,000 (1.714 US$) as per the 2006-2007 Government of Uganda salary structure.

An illustrative example is of a family having a diabetic father on Glibenclamide 5mg, a hypertensive mother on Nifedipine 20mg and a child with an acute respiratory tract infection on Amoxacillin 125mg/5ml suspension.

For this family, it would require almost two and a half days wages for treatment in the mission facility while treatment from the private facility would require three days’ wages.

Assuming that these medicines are not obtained from the public sector and treatment would have to be sought from the private or mission facilities, the treatment would be unaffordable in these facilities.

Many live on much less, so affordability is even worse for that proportion.

**5. Conclusion**

The three surveys indicate that availability of medicines is still a major hindrance to access to essential medicines in the Public sector facilities yet in the Mission and Private sector facilities, the prices charged are high.